

EFCBG

INCENTIVES FOR E-300 PLUS

As of June 1, 2010

TIER #0 Standard E-300, Sliding scale point system. No \$ incentive.

TIER #1 (300 to 340 points) E-300 Plus; plus 4 Prescriptive Requirements. \$500.00 Rebate.

TIER #2 (341-380 points) E-300 Plus; All of Tier #1, plus 5 Prescriptive Requirements. \$1000 Rebate.

TIER #3 (381 or more points) E-300 Plus; All of tier #1 and Tier #2, plus 5 Prescriptive Requirements. \$2000 Rebate.

TIER #1

- 1) **Solar Orientation;** Home design, and building lot selection must take full advantage of winter solar gain, and to reduce summer solar gain. (Maximize southern exposure; primarily the glazing, with properly sized overhangs. Minimize western and eastern exposure).
- 2) **Framing/Insulation;** Advanced corners and T-posts. (Insulated corners and T's). Insulate exterior headers. Provide raised heel truss/rafter. (Insulation to top of top plates). Install OSB, rigid foam, drywall or other solid sheathing behind knee walls and other walls separating conditioned space from unconditioned attic. Treat garage-to-conditioned space walls as exterior walls. Framing must accommodate insulation to achieve full rated R-value. Provide solid blocking to maintain the integrity of the air barrier. (Ex. Under the knee walls of FROGS. Rafter ends and cantilevers, etc.) Thermal and air barrier must be continuous and complete, including areas behind tubs and showers, fireplace chases, soffits and trey ceilings. Insulation minimum requirements; properly installed, Ceilings = R-30, Walls = R-15, Floors = R-19. (Details available on E-300 Specifications document).
- 3) **Building Air-Tightness Standard;** The home must be substantially air-tight. Cannot exceed 0.50 Cubic Feet per Minute (CFM) air leakage per sq. ft. thermal envelope/surface area at 50 pascals pressure, using a Blower Door.
- 4) **HVAC;** Document equipment sizes according to ACCA Manual-J or equivalent accepted method. Duct system must be substantially airtight. Using Blower Door/Pressure Pan test, *supply* vents cannot read higher 1.5 pascals, with no more than two reading higher than 1.0 pascals. *Return* vents must also read less than 1.5 pascals. If testing is done with a Duct Blaster, at 25 pascals, leakage shall be 5% or less of total floor area. (In CFM's).

TIER #2

All of the requirements in Tier #1, plus;

- 1) **Building Air-Tightness Standard;** Cannot exceed 0.35 Cubic Feet per Minute (CFM) air leakage/sq.ft. surface area, at an induced 50 pascal pressure using a Blower Door.
- 2) **Foam Sheathing;** for all “knee walls” and other walls separating conditioned from enclosed unconditioned space. (Including garage-to-house wall).
- 3) **Insulation Requirement;** properly installed; Ceilings= R-38.
- 4) **HVAC;** Document system total airflow per manufacturers’ specifications (“wide open” for zoned and variable speed systems; document refrigerant charge, per manufacturers’ specifications and operating conditions; document sequence of operations for all component equipment per manufacture’s specifications; install ‘smart recovery’-type thermostats for heat pumps. Required air returns in closable rooms except kitchens and bath rooms. (Room zone pressures relative to the reference space must not exceed (+ or -) 3 pascals, with doors closed and air handler operating.
- 5) **Water Conservation;** Require water-saving commodes equivalent to the water saving, or better than, dual-flushing commodes. Require super-low flow shower heads of 2.0 –or-less gallons per minute at 80 psi. Require dishwasher with an Energy Factor (EF) of at least 0.65. (Energy use of less than 340 kWh/year. Based on heating lower amounts of water).

TIER #3

All of the requirements in Tier #2, plus:

- 1) **Wall Total R-Value.** Requirement = R-20.
- 2) **Building Air-Tightness Standard.** Cannot exceed 0.25 Cubic Feet per Minute air leakage/sq. ft. surface area when under induced 50 Pascal pressure, using a Blower Door.
- 3) **HVAC;** Document (all--“wide open”--) room-by-room test and balance of supply and return airflow, and dry bulb temperatures (no more than + or – 3 degrees upon thermostat ‘satisfied’). Document actual blower, compressor, and total amp draw of the system, per manufacturers’ specifications. Document balance point calculations for house/heat pumps and positive auxiliary heat lock-out (user adjustable) above balance point. Document delivered heating and cooling Btu’s per unit of input (kWh’s, ccf’s, gals.), per manufacturers’ specifications.
- 4) **Foundations;** Home cannot be built on conventional, open ventilated crawlspaces. (Requires slab, raised slab or one of the levels of sealed/controlled crawlspaces or basements).

- 5) **Water conservation.** Incorporate a xeriscaping strategy; referring to landscaping and gardening in ways that reduce the need for supplemental irrigation.

For more information or details on the E-300 segment of the EECBG/Incentives for E-300 Plus, you can contact me at;

Andy Yakim

Energy Services Supervisor

Greenville Utilities

PO Box 1847 Greenville, NC 27835

252-551-1525 office

252-551-1471 fax

Yakima@guc.com